

Claims

- [c1] A shaving gel applicator, comprising: a hollow housing adapted to be gripped by a human hand; said housing having a closed distal end; said housing having an open proximal end; a brush base mounted in said open proximal end in closing relation to said open proximal end; at least one brush of predetermined geometrical configuration mounted on said brush base; a heating means positioned in heat-transfer relation to said at least one brush; whereby heat generated by said heating means is transferred to shaving gel that is deposited upon said at least one brush; whereby said shaving gel is heated at the moment of application.
- [c2] The shaving gel applicator of claim 1, further comprising: a power source for said heating means disposed within a hollow interior of said housing; a shaving gel cartridge disposed in said hollow interior of said hollow housing; a throughbore formed in said brush base; a conduit disposed in fluid communication between said shaving gel cartridge and said throughbore; means for selectively urging shaving gel in said shaving gel cartridge to flow from said shaving gel cartridge, through said conduit, through said throughbore, and onto said at least one brush.
- [c3] The applicator of claim 2 further comprising: a cartridge holder disposed within said hollow interior of said housing; said cartridge holder adapted to releasably receive said shaving gel cartridge.
- [c4] The applicator of claim 3, further comprising: said cartridge holder being adapted to slideably receive said shaving gel cartridge.
- [c5] The applicator of claim 3, further comprising: said cartridge holder adapted to screw-threadably receive said shaving gel cartridge.

- [c6] The applicator of claim 3, further comprising: a cartridge detector disposed in said cartridge holder; said cartridge detector adapted to detect the presence of a cartridge in said cartridge holder; said cartridge detector adapted to identify the type of cartridge in said cartridge holder; said cartridge detector being selected from a group of detectors consisting of mechanical, electrical, digital and wireless detectors.
- [c7] The shaving gel applicator of claim 2, further comprising: a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft to which is secured said heating means and said brush base so that said heating means and said brush base rotate conjointly with said output shaft.
- [c8] The shaving gel applicator of claim 1, further comprising: said brush base being centrally apertured; said at least one brush being a brush having an annular configuration; said heating means being disposed in said central aperture, radially inwardly of said brush having an annular configuration, so that heat from said heating means is conducted radially outwardly to said brush having an annular configuration and to shaving gel deposited upon said brush having an annular configuration.
- [c9] The shaving gel applicator of claim 1, further comprising: said at least one brush including a plurality of brushes disposed in circumferentially spaced relation relative to one another; said heating means being disposed radially inwardly of said circumferentially spaced apart brushes so that heat from said heating means is conducted radially outwardly to said brushes and to shaving gel deposited upon said brushes.
- [c10] The shaving gel applicator of claim 9, further comprising: each brush of said plurality of brushes being rotatably mounted with respect to said brush base; a

motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft; a gear means for causing said at least one brush to rotate when said output shaft is rotating; said gear means disposed within said hollow interior.

- [c11] The shaving gel applicator of claim 10, further comprising: said gear means including a sun gear mounted on said output shaft for conjoint rotation therewith; each brush of said plurality of brushes being mounted on an axle parallel to said output shaft; a planet gear mounted on each of said axles; each of said planet gears being disposed in meshing engagement with said sun gear so that rotation of said sun gear effects simultaneous and corresponding rotation of each of said planet gears and hence of each of said brushes of said plurality of brushes.
- [c12] The shaving gel applicator of claim 1, further comprising: each brush of said at least one brush being mounted for linear reciprocation with respect to said brush base; a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft; a linkage means that translates rotary motion to linear reciprocation so that each brush of said at least one brush reciprocates in a linear motion when said output shaft is rotating; said linkage means disposed within said hollow interior.
- [c13] The shaving gel applicator of claim 1, further comprising: said predetermined geometrical configuration of each brush being a disc shape.
- [c14] The shaving gel applicator of claim 1, further comprising: said predetermined geometrical configuration of each brush being a square shape.
- [c15] The shaving gel applicator of claim 1, further comprising: said at least one brush including two brushes; said predetermined geometrical configuration of each brush of said two brushes being a rectangular shape; said heating means

having a straight configuration; said two brushes being disposed in parallel relation to one another on opposite sides of said heating means so that said heating means is disposed in sandwiched relation between said two rectangular brushes.

- [c16] The shaving gel applicator of claim 15, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said two rectangular brushes and said heating means.
- [c17] The shaving gel applicator of claim 1, further comprising: said at least one brush including one brush; said predetermined geometrical configuration of said brush being a rectangular shape; said heating means including a first heating means and a second heating means, each of which has a straight configuration; said first and second heating means being disposed in parallel relation to one another on opposite sides of said brush of rectangular shape so that said brush of rectangular shape is disposed in sandwiched relation between said first and second heating means.
- [c18] The shaving gel applicator of claim 17, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said rectangular brush and said first and second heating means.
- [c19] A shaving gel applicator, comprising: a hollow housing adapted to be gripped by a human hand; said housing having a closed distal end; said housing having an open proximal end; a brush base mounted in said open proximal end in closing relation to said open proximal end; at least one brush of predetermined geometrical configuration mounted on said brush base; a shaving gel cartridge disposed in said hollow interior of said hollow housing; a throughbore formed in said brush base; a conduit disposed in fluid communication between said

shaving gel cartridge and said throughbore; means for selectively urging shaving gel in said shaving gel cartridge to flow from said shaving gel cartridge, through said conduit, through said throughbore, and onto said at least one brush.

[c20] The shaving gel applicator of claim 19, further, comprising: a heating means positioned in heat-transfer relation to said at least one brush; whereby heat generated by said heating means is transferred to shaving gel that is deposited upon said at least one brush; whereby said shaving gel is heated at the moment of application.

[c21] The shaving gel applicator of claim 20, further comprising: a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft to which is secured said heating means and said brush base so that said heating means and said brush base rotate conjointly with said output shaft.

[c22] The shaving gel applicator of claim 21, further comprising: said brush base being centrally apertured; said at least one brush being a brush having an annular configuration; said heating means being disposed in said central aperture, radially inwardly of said brush having an annular configuration, so that heat from said heating means is conducted radially outwardly to said brush having an annular configuration and to shaving gel deposited upon said brush having an annular configuration.

[c23] The shaving gel applicator of claim 22, further comprising: said at least one brush including a plurality of brushes disposed in circumferentially spaced relation relative to one another; said heating means being disposed radially inwardly of said circumferentially spaced apart brushes so that heat from said heating means is conducted radially outwardly to said brushes and to shaving

gel deposited upon said brushes.

- [c24] The shaving gel applicator of claim 19, further comprising: each brush of said plurality of brushes being rotatably mounted with respect to said brush base; a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft; a gear means for causing said at least one brush to rotate when said output shaft is rotating; said gear means disposed within said hollow interior.
- [c25] The shaving gel applicator of claim 23, further comprising: said gear means including a sun gear mounted on said output shaft for conjoint rotation therewith; each brush of said plurality of brushes being mounted on an axle parallel to said output shaft; a planet gear mounted on each of said axles; each of said planet gears being disposed in meshing engagement with said sun gear so that rotation of said sun gear effects simultaneous and corresponding rotation of each of said planet gears and hence of each of said brushes of said plurality of brushes.
- [c26] The shaving gel applicator of claim 19, further comprising: each brush of said plurality of brushes being mounted for linear reciprocation with respect to said brush base; a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft; a linkage means that translates rotary motion to linear reciprocation so that each brush of said plurality of brushes reciprocates in a linear motion when said output shaft is rotating; said linkage means disposed within said hollow interior.
- [c27] The shaving gel applicator of claim 19, further comprising: said predetermined geometrical configuration of each brush being a disc shape.
- [c28] The shaving gel applicator of claim 19, further comprising: said predetermined geometrical configuration of each brush being a square shape.

- [c29] The shaving gel applicator of claim 20, further comprising: said at least one brush including two brushes; said predetermined geometrical configuration of each brush of said two brushes being a rectangular shape; said heating means having a straight configuration; said two brushes being disposed in parallel relation to one another on opposite sides of said heating means so that said heating means is disposed in sandwiched relation between said two rectangular brushes.
- [c30] The shaving gel applicator of claim 28, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said two rectangular brushes and said heating means.
- [c31] The shaving gel applicator of claim 20, further comprising: said at least one brush including one brush; said predetermined geometrical configuration of said brush being a rectangular shape; said heating means including a first heating means and a second heating means, each of which has a straight configuration; said first and second heating means being disposed in parallel relation to one another on opposite sides of said brush of rectangular shape so that said brush of rectangular shape is disposed in sandwiched relation between said first and second heating means.
- [c32] The shaving gel applicator of claim 30, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said rectangular brush and said first and second heating means.
- [c33] The shaving gel applicator of claim 19, further comprising: a second heating means; said first and second heating means being positioned and in diametrically opposed relation to one another, relative to a center of said open end.

- [c34] A shaving gel applicator, comprising: a hollow housing adapted to be gripped by a human hand; said housing having a closed distal end; said housing having an open proximal end; a brush base mounted in said open proximal end in closing relation to said open proximal end; at least one brush of predetermined geometrical configuration mounted on said brush base; a shaving gel cartridge disposed in said hollow interior of said hollow housing; a throughbore formed in said brush base; a conduit disposed in fluid communication between said shaving gel cartridge and said throughbore; means for selectively urging shaving gel in said shaving gel cartridge to flow from said shaving gel cartridge, through said conduit, through said throughbore, and onto said at least one brush. a heating means positioned in heat-transfer relation to said at least one brush; whereby heat generated by said heating means is transferred to shaving gel that is deposited upon said at least one brush; whereby said shaving gel is heated at the moment of application.
- [c35] The shaving gel applicator of claim 34, further comprising: a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft to which is secured said heating means and said brush base so that said heating means and said brush base rotate conjointly with said output shaft.
- [c36] The shaving gel applicator of claim 35, further comprising: said brush base being centrally apertured; said at least one brush being a brush having an annular configuration; said heating means being disposed in said central aperture, radially inwardly of said brush having an annular configuration, so that heat from said heating means is conducted radially outwardly to said brush having an annular configuration and to shaving gel deposited upon said brush having an annular configuration.
- [c37] The shaving gel applicator of claim 36, further comprising: said at least one

brush including a plurality of brushes disposed in circumferentially spaced relation relative to one another; said heating means being disposed radially inwardly of said circumferentially spaced apart brushes so that heat from said heating means is conducted radially outwardly to said brushes and to shaving gel deposited upon said brushes.

[c38] The shaving gel applicator of claim 33, further comprising: each brush of said plurality of brushes being rotatably mounted with respect to said brush base; a motor means disposed within said hollow interior of said hollow housing; said motor means having an output shaft; a gear means for causing said at least one brush to rotate when said output shaft is rotating; said gear means disposed within said hollow interior.

[c39] The shaving gel applicator of claim 37, further comprising: said gear means including a sun gear mounted on said output shaft for conjoint rotation therewith; each brush of said plurality of brushes being mounted on an axle parallel to said output shaft; a planet gear mounted on each of said axles; each of said planet gears being disposed in meshing engagement with said sun gear so that rotation of said sun gear effects simultaneous and corresponding rotation of each of said planet gears and hence of each of said brushes of said plurality of brushes.

[c40] The shaving gel applicator of claim 33, further comprising: each brush of said plurality of brushes being mounted for linear reciprocation with respect to said brush base; a motor means disposed within said hollow interior of said hollow housing; each brush of said plurality of brushes reciprocates in a linear motion when said output shaft is rotating; said linkage means disposed within said hollow interior.

[c41] The shaving gel applicator of claim 33, further comprising: said predetermined

geometrical configuration of each brush being a disc shape.

- [c42] The shaving gel applicator of claim 33, further comprising: said predetermined geometrical configuration of each brush being a square shape.
- [c43] The shaving gel applicator of claim 34, further comprising: said at least one brush including two brushes; said predetermined geometrical configuration of each brush of said two brushes being a rectangular shape; said heating means having a straight configuration; said two brushes being disposed in parallel relation to one another on opposite sides of said heating means so that said heating means is disposed in sandwiched relation between said two rectangular brushes.
- [c44] The shaving gel applicator of claim 32, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said two rectangular brushes and said heating means.
- [c45] The shaving gel applicator of claim 34, further comprising: said at least one brush including one brush; said predetermined geometrical configuration of said brush being a rectangular shape; said heating means including a first heating means and a second heating means, each of which has a straight configuration; said first and second heating means being disposed in parallel relation to one another on opposite sides of said brush of rectangular shape so that said brush of rectangular shape is disposed in sandwiched relation between said first and second heating means.
- [c46] The shaving gel applicator of claim 44, further comprising: a motor means disposed in said hollow housing; said motor means adapted to cause linear reciprocation of said rectangular brush and said first and second heating means.

- [c47] The shaving gel applicator of claim 43, further comprising: a second heating means; said first and second heating means being positioned and in diametrically opposed relation to one another, relative to a center of said open end.
- [c48] A shaving gel applicator, comprising: a hollow housing adapted to be gripped by a human hand; said housing having a closed distal end; said housing having an open proximal end; a brush base mounted in said open proximal end in closing relation to said open proximal end; at least one brush of predetermined geometrical configuration mounted on said brush base; a shaving gel pack disposed in said hollow interior of said hollow housing; a heating unit that receives said shaving gel pack therewithin so that gel in said shaving gel pack is evenly heated by said heating unit; a gel tube having a first end in fluid communication with said gel in said gel shaving pack and a second end in fluid communication with said at least one brush; a power source for supplying power to said heating unit; whereby said gel is heated in said gel shaving pack and is dispensed onto said brushes in heated condition.
- [c49] A shaving gel applicator, comprising: a hollow housing adapted to be gripped by a human hand; said housing having a closed distal end; said housing having an open proximal end; a brush base mounted in said open proximal end in closing relation to said open proximal end; at least one brush of predetermined geometrical configuration mounted on said brush base; a shaving gel pack disposed in said hollow interior of said hollow housing; a heating rod that is at least partially surrounded by said shaving gel pack so that gel in said shaving gel pack is evenly heated by said heating rod; a gel tube having a first end in fluid communication with said gel in said gel shaving pack and a second end in fluid communication with said at least one brush; a power source for supplying power to said heating rod; whereby said gel is heated in said gel shaving pack

and is dispensed onto said brushes in heated condition.